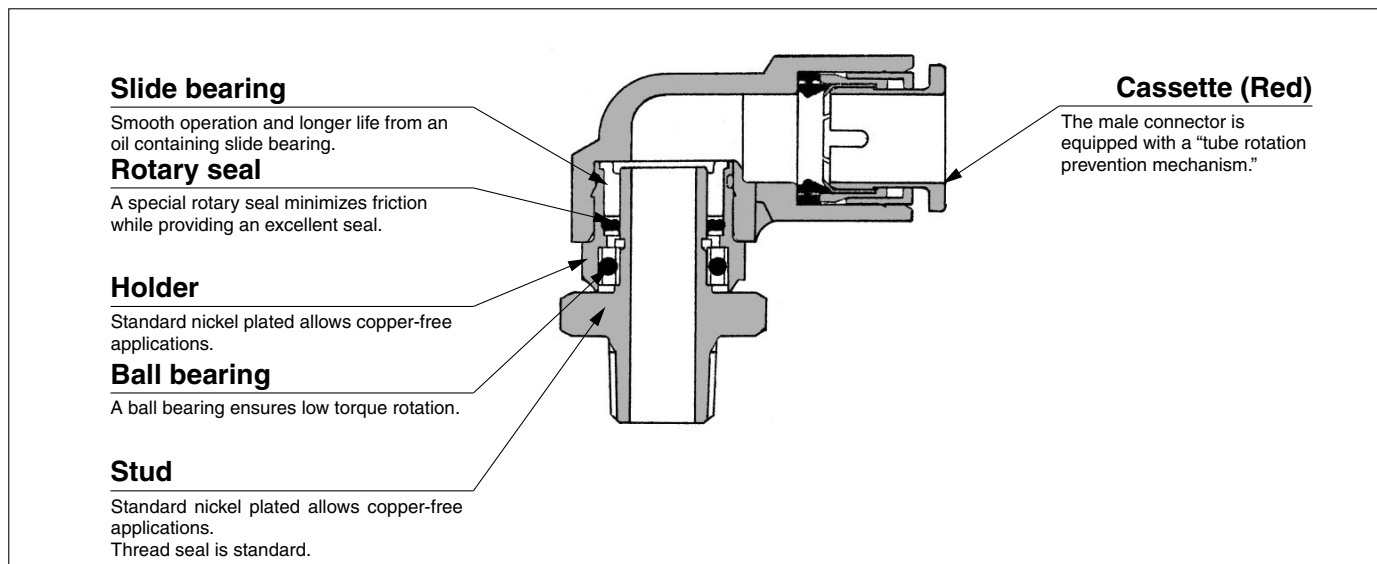




# Inch-size Rotary One-touch Fittings Standard Type

## Series *KS*

Applicable Tubing: Inch Size



### Low-torque rotation style rotary One-touch fittings

Applicable to use for oscillating and rotating sections in robots.

Applicable to non-copper type (With electroless nickel plated)

Thread seal is standard.



Male elbow

Male connector

### Applicable Tubing

Tubing material <sup>Note)</sup>	Nylon, Soft nylon, Polyurethane
Tubing O.D.	ø5/32", ø1/4", ø5/16", ø3/8"

Note) Monitor max.operating pressure for soft nylon and polyurethane tubing.

### Specification

Fluid	Air
Maximum operating pressure	1.0 MPa
Operating vacuum pressure	-100 kPa
Proof pressure	3.0 MPa
Ambient and fluid temperature	-5 to 60°C (No freezing)
Thread	ANSI/ASME B1.20.1-1983 (NTP thread) JIS B 0212 2A, Class 2B (UNF thread)

### Rotating Torque/Allowable Number of Rotations



Applicable tubing O.D.	ø5/32"	ø1/4"	ø5/16"	ø3/8"
Rotating torque (N·m) <sup>Note)</sup>	0.006	0.012	0.014	0.020
Allowable number of rotations (S <sup>-1</sup> )	8.3	8.3	6.7	5

Note) Rotating torque under pressure 0.5 MPa

### Principal Parts Material

Body	PBT
Stud, Holder, Guide	Stainless steel 304, C3604BD (With electroless nickel plated)
Chuck, Retainer	Stainless steel 304
Collet, Release button, Snap ring	Polyacetal
O-ring, Packing	NBR
Rotary seal	NBR
Slide bearing	Oil-containing polyacetal
Scraper	—
Ball bearing	Bearing steel
Gasket	Stainless steel 304, NBR

## Series KS

Model	Connection thread	Applicable tubing O.D. (inch)			
		$\phi 5/32''$	$\phi 1/4''$	$\phi 5/16''$	$\phi 3/8''$
Male connector <b>KSH</b> 	10-32 UNF	●			
	NPT 1/8	●	●	●	
	NPT 1/4		●	●	●
	NPT 3/8				●
Male elbow <b>KSL</b> 	10-32 UNF	●			
	NPT 1/8	●	●	●	
	NPT 1/4		●	●	●
	NPT 3/8				●

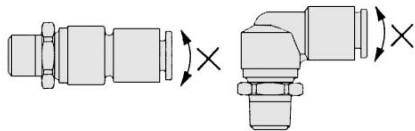
- K
- M
- H
- D
- MS
- T
- VMG

### ⚠ Precautions

Be sure to read before handling. Refer to pages 15-18-3 to 15-18-4 for Safety Instructions and Common Precautions on the products mentioned in this catalog, and refer to pages 15-1-10 to 15-1-11 for Precautions on every series.

#### ⚠ Caution

- Implement the tube piping in such a way that the lateral load should not be applied. Although ball bearing is adopted, however if the lateral load were applied on it, it may adversely affect the life expectancy. A flexible polyurethan tube is recommended when the lateral load is applied.



# Series KS

## Male Connector: KSH (Standard)

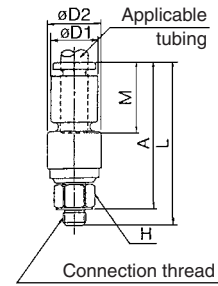
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Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	D1	D2	L	A *		M	Min. port size	Effective area (mm <sup>2</sup> )		Weight (g)
											Nylon	Urethane	
5/32	10-32 UNF	KSH03-32	8	10.4	12	36.5	33	16	2.5	4.0	4.0	9	
	1/8	KSH03-34S	12.7				38.5					34.5	14
1/4	1/8	KSH07-34S	14.29	13.2	14	39.5	35.5	17	4	13.4	10.4	17	
	1/4	KSH07-35S				42.5	36.5					23	
5/16	1/8	KSH09-34S	17.46	15.2	17	44	40	18.5	6	26.1	18.0	23	
	1/4	KSH09-35S				47	41					29	
3/8	1/4	KSH11-35S	22.23	17.9	22	54	48	21	7	36.3	29.5	55	
	3/8	KSH11-36S				55	48.5					63	

\* Reference dimensions after NPT thread installation.

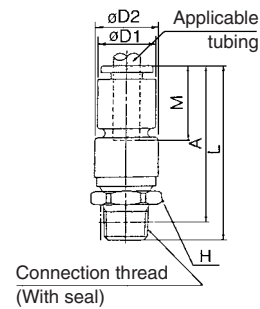
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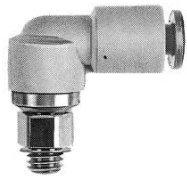


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## Male Elbow: KSL (Standard)

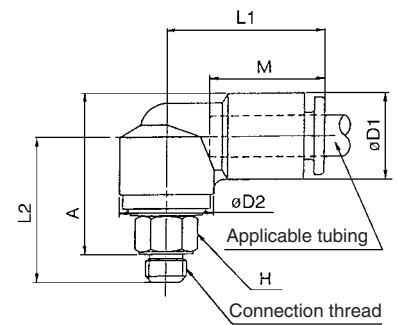
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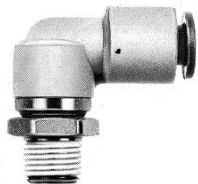
Applicable tubing O.D. (inch)	Connection thread UNF NPT	Model	H (Width across flats)	D1	D2	L1	L2	A *		M	Min. port size	Effective area (mm <sup>2</sup> )		Weight (g)
												Nylon	Urethane	
5/32	10-32 UNF	KSL03-32	8	10.4	12	21	20.5	22	16	2.5	3.5	3.5	9	
	1/8	KSL03-34S	12.7					22					23.5	14
1/4	1/8	KSL07-34S	14.29	13.2	14	23.5	23	25.5	17	4	8.6	8.6	17	
	1/4	KSL07-35S					26	26.5					23	
5/16	1/8	KSL09-34S	17.46	15.2	17	26	26.5	30	18.5	6	21.6	14.9	23	
	1/4	KSL09-35S					29.5	31					29	
3/8	1/4	KSL11-35S	22.23	17.9	22	31.5	34	37	21	7	30.5	25.0	56	
	3/8	KSL11-36S					35	38					64	

\* Reference dimensions after NPT thread installation.

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